

## ABSTRACT OF THE DISCLOSURE

A method and apparatus are provided for operating a transmission amplifier, particularly a mobile communications terminal, with the transmission amplifier being fed with a supply voltage and with any nonlinearity of the  
5 transmission amplifier being substantially compensated for via a predistortion unit for data values in an input data stream, wherein, at least at the start of transmission operation or after a considerable change in the operating parameters, the transmission amplifier is operated with a supply voltage which is of such a magnitude that the transmission amplifier operates in the linear region, and the  
10 supply voltage for the transmission amplifier is reduced to the extent to which a quality factor for the compensation for the nonlinearity of the transmission amplifier is increased by the predistortion unit.